Amendment filed on August 29, 2005

Reply to Office Action dated April 28, 2005

## **AMENDMENTS TO THE DRAWINGS**

The first attached sheet of drawings includes changes to FIG. 1. The second attached sheet of drawings includes changes to FIG. 2. These sheets, which include FIG. 1 and FIG. 2, replace the original sheet including FIG. 1 and FIG. 2. The third attached sheet of drawings includes changes to FIG. 3. The third attached sheet, which includes FIG. 3, replaces the original sheet including FIG. 3. The fourth attached sheet of drawings hereby adds FIG. 4. The drawing changes are made to overcome the Examiner's objection to the drawings.

Attachment: Replacement Sheets

Annotated Sheets Showing Changes

New Drawing Sheet (FIG. 4)

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## **REMARKS**

At the outset, the Examiner is thanked for the thorough review and consideration of the pending application. The Office Action dated April 28, 2005 has been received and its contents carefully reviewed.

FIG. 1, FIG. 2 and FIG. 3 are hereby amended and FIG. 4 is hereby added. The specification is hereby amended to reflect changes in the drawings. Also, claims 1 and 8 are hereby amended. No new matter is added. Claims 1–13 are pending. Claims 1-6, 8 and 9 are currently examined and claims 7 and 10-13 are withdrawn from consideration. Reexamination and reconsideration of the examined claims are respectfully requested.

In the Office Action, the drawings are objected to under 37 C.F.R. 1.83(a). Applicant hereby amends FIG. 1 and adds FIG. 4 to overcome the objection. Also, the specification is amended to reflect changes in the drawings. No new matter has been added. Accordingly, Applicant respectfully requests withdrawal of this objection.

In addition, in the Office Action, claims 1-3 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,163,802 to <u>Poinelli</u> (hereinafter "Poinelli") in view of U.S. Patent No. 6,129,496 to <u>Iwasaki et al.</u> (hereinafter "Iwasaki"). Claims 6, 8, and 9 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Poinelli in view of Iwasaki, and further in view of U.S.Patent No. 6,019,563 to <u>Murata et al.</u> (hereinafter "Murata"). Claim 5 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Poinelli in view of Iwasaki, and further in view of U.S.Patent No. 5,510,984 to Markin et al. (hereinafter "Markin"):

Furthermore, in the Office Action, claims 1-4 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Iwasaki in view of U.S. Patent No. 5,570,990 to Bonora et al. (hereinafter "Bonora") or in view of Poinelli. Claims 6, 8, and 9 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Iwasaki in view of Poinelli or in view of Bonora, and further in view of Murata. Claim 5 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Iwasaki in view of Poinelli or in view of Bonora, and further in view of Markin.

The rejection of claims 1-3 as being unpatentable over Poinelli in view of Iwasaki is respectfully traversed and reconsideration is requested.

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over the cited references.

Claim 1 is allowable over Poinelli in view of Iwasaki in that claim 1 recites a combination of elements including, for example, "an auto guided vehicle having a bar code reader, the auto guided vehicle being able to transfer the cassette to a process stage within the substrate transfer system; a moving path unit to determine a moving path of the auto guided vehicle; and a plurality of process stages at which processes are conducted on a substrate during fabrication of the LCD device." None of the cited references, singly or in combination, teaches or suggests at least these features of the claimed invention.

Specifically, the system of present claim 1 is different from the modified system of Poinelli in that the auto guided vehicle of present claim 1 has "a bar code reader" and can "transfer the cassette to a process stage within the substrate transfer system." In contrast, Poinelli merely teaches a self-propelled robot having platforms on which magazines can be placed. See column 4, lines 20-25 and 30-40 and Figure 7. Therefore, Poinelli does not teach that the auto guided vehicle can "transfer the cassette to a process stage within the substrate transfer system." Iwasaki does not cure this deficiency of Poinelli. Accordingly, Applicant

The rejection of claims 6, 8 and 9 as being unpatentable over Poinelli in view of Iwasaki and further in view of Murata is respectfully traversed and reconsideration is requested.

respectfully submits that claim 1 and claims 2 and 3, which depend therefrom, are allowable

With respect to claim 6, Applicant respectfully submits that Murata fails to cure the aforementioned defects associated with the teachings of Poinelli and Iwasaki. None of the cited references, singly or in combination, teaches or suggests "an auto guided vehicle having a bar code reader, the auto guided vehicle being able to transfer the cassette to a process stage within the substrate transfer system; a moving path unit to determine a moving path of the auto guided vehicle; and a plurality of process stages at which processes are conducted on a substrate during fabrication of the LCD device," as recited in independent claim 1. For at least this reason, claim 6, which depends from claim 1, is allowable over the cited references.

Furthermore, claim 8 is allowable over Poinelli in view of Iwasaki and further in view of Murata in that claim 8 recites a combination of elements including, for example, "the cassette stoker having a bar code reader; an auto guided vehicle being able to transfer the cassette to a process stage within the substrate transfer system; a rail disposed along a moving

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path of the auto guided vehicle; and a plurality of process stages at which processes are conducted on a substrate during fabrication of the LCD device." None of the cited references, singly or in combination, teaches or suggests at least these features of the claimed invention. Specifically, the system of present claim 8 is different from the modified system of Poinelli in that the cassette stoker of present claim 8 has "a bar code reader" and the auto guided vehicle of present claim 8 can "transfer the cassette to a process stage within the substrate transfer system." In contrast, Poinelli merely teaches a self-propelled robot having platforms on which magazines can be placed. See column 4, lines 20-25 and 30-40 and Figure 7. Therefore, Poinelli does not teach that the auto guided vehicle can "transfer the cassette to a process stage within the substrate transfer system." Nor does Poinelli teach that the cassette stoker has "a bar code reader." Iwasaki and Murata do not cure these deficiencies of Poinelli. Accordingly, Applicant respectfully submits that claim 8 and claim 9, which depends therefrom, are allowable over the cited references.

The rejection of claim 5 as being unpatentable over Poinelli in view of Iwasaki and further in view of Markin is respectfully traversed and reconsideration is requested. Applicant respectfully submits that Markin fails to cure the aforementioned defects associated with the teachings of Poinelli and Iwasaki. None of the cited references, singly or in combination, teaches or suggests "an auto guided vehicle having a bar code reader, the auto guided vehicle being able to transfer the cassette to a process stage within the substrate transfer system; a moving path unit to determine a moving path of the auto guided vehicle; and a plurality of process stages at which processes are conducted on a substrate during fabrication of the LCD device," as recited in independent claim 1. For at least this reason, claim 5, which depends from claim 1, is allowable over the cited references.

The rejection of claims 1-4 as being unpatentable over Iwasaki in view of Bonora or Poinelli is respectfully traversed and reconsideration is requested.

Claim 1 is allowable over Iwasaki in view of Bonora or Poinelli in that claim 1 recites a combination of elements including, for example, "an auto guided vehicle having a bar code reader, the auto guided vehicle being able to transfer the cassette to a process stage within the substrate transfer system; a moving path unit to determine a moving path of the auto guided vehicle; and a plurality of process stages at which processes are conducted on a substrate

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during fabrication of the LCD device." None of the cited references, singly or in combination, teaches or suggests at least these features of the claimed invention.

Specifically, the system of present claim 1 is different from the modified system of Iwasaki in that the auto guided vehicle of present claim 1 "has a bar code reader" and can "transfer the cassette to a process stage within the substrate transfer system." In contrast, Iwasaki merely teaches an automatic carrier 38 for providing connection between stocker 36, various stocker controllers 60, 64 and 66, and inter-stocker transport device 42. See column 12, line 65 – col. 13, line 1 and Figures 1 and 2. Therefore, Iwasaki does not teach that the auto guided vehicle has "a bar code reader" or can "transfer the cassette to a process stage within the substrate transfer system." Bonora nor Poinelli cures these deficiencies of Iwasaki. Accordingly, Applicant respectfully submits that claim 1 and claims 2-4, which depend therefrom, are allowable over the cited references.

In addition, Applicant respectfully submits that there is no motivation for one of ordinary skill in the art to combine the cited references and arrive at the claimed invention with any reasonable expectation of success. As best understood, Bonora teaches a human guided stocker. Therefore, Applicant respectfully submits that Bonora involves non-analogous art for the purpose of analyzing the obviousness of the subject matter at issue. Applicant further respectfully submits that the motivation to combine the references comes from the present invention and not from the cited references, which is impermissible.

The rejection of claims 6, 8 and 9 as being unpatentable over Iwasaki in view of Poinelli or Bonora and further in view of Murata is respectfully traversed and reconsideration is requested.

With respect to claim 6, Applicant respectfully submits that Murata fails to cure the aforementioned defects associated with the teachings of Iwasaki, Poinelli and Bonora. None of the cited references, singly or in combination, teaches or suggests "an auto guided vehicle having a bar code reader, the auto guided vehicle being able to transfer the cassette to a process stage within the substrate transfer system; a moving path unit to determine a moving path of the auto guided vehicle; and a plurality of process stages at which processes are conducted on a substrate during fabrication of the LCD device," as recited in independent claim 1. For at least this reason, claim 6, which depends from claim 1, is allowable over the cited references.

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Furthermore, claim 8 is allowable over Iwasaki in view of Poinella or Bonora and further in view of Murata in that claim 8 recites a combination of elements including, for example, "the cassette stoker having a bar code reader; an auto guided vehicle being able to transfer the cassette to a process stage within the substrate transfer system; a rail disposed along a moving path of the auto guided vehicle; and a plurality of process stages at which processes are conducted on a substrate during fabrication of the LCD device." None of the cited references, singly or in combination, teaches or suggests at least these features of the claimed invention. Specifically, the system of present claim 8 is different from the modified system of Iwasaki in that the the cassette stoker of present claim 8 has "a bar code reader" and the auto guided vehicle of present claim 8 can "transfer the cassette to a process stage within the substrate transfer system." In contrast, Iwasaki merely teaches an automatic carrier 38 for providing connection between stocker 36, various stocker controllers 60, 64 and 66, and inter-stocker transport device 42. See column 12, line 65 – col. 13, line 1 and Figures 1 and 2. Therefore, Iwasaki does not teach that the auto guided vehicle can "transfer the cassette to a process stage within the substrate transfer system." Bonora, Poinelli nor Murata cures these deficiencies of Iwasaki. Accordingly, Applicant respectfully submits that claim 8 and claim 9, which depends therefrom, are allowable over the cited references.

In addition, Applicant respectfully submits that there is no motivation for one of ordinary skill in the art to combine the cited references and arrive at the claimed invention with any reasonable expectation of success. As best understood, Bonora teaches a human guided stocker. Therefore, Applicant respectfully submits that Bonora involves non-analogous art for the purpose of analyzing the obviousness of the subject matter at issue. Applicant further respectfully submits that the motivation to combine the references comes from the present invention and not from the cited references, which is impermissible.

The rejection of claim 5 as being unpatentable over Iwasaki in view of Poinelli or Bonora and further in view of Markin is respectfully traversed and reconsideration is requested. Applicant respectfully submits that Markin fails to cure the aforementioned defects associated with the teachings of Iwasaki, Poinelli and Bonora. None of the cited references, singly or in combination, teaches or suggests "an auto guided vehicle having a bar code reader, the auto guided vehicle being able to transfer the cassette to a process stage within the substrate transfer system; a moving path unit to determine a moving path of the

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auto guided vehicle; and a plurality of process stages at which processes are conducted on a substrate during fabrication of the LCD device," as recited in independent claim 1. For at

least this reason, claim 5, which depends from claim 1, is allowable over the cited references.

Applicants believe the foregoing amendments place the application in condition for

allowance and early, favorable action is respectfully solicited.

If for any reason the Examiner finds the application other than in condition for

allowance, the Examiner is requested to call the undersigned attorney at (202) 496-7500 to

discuss the steps necessary for placing the application in condition for allowance. All

correspondence should continue to be sent to the below-listed address.

If these papers are not considered timely filed by the Patent and Trademark Office,

then a petition is hereby made under 37 C.F.R. §1.136, and any additional fees required under

37 C.F.R. §1.136 for any necessary extension of time, or any other fees required to complete

the filing of this response, may be charged to Deposit Account No. 50-0911. Please credit

any overpayment to deposit Account No. 50-0911. A duplicate copy of this sheet is enclosed.

The undersigned hereby signs this filing under the authority provided by 37 C.F.R.

§1.34 pending the filing of a Power of Attorney and Statement under 3.73(b) executed by

Assignee.

Dated: August 29, 2005

Respectfully submitted,

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Attachments



